

The Effectiveness of Peer Discussion in Teaching Physics at the High School Level

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ABSTRACT

The purpose of this research is to investigate the effectiveness of peer discussion in teaching physics at the high school level. This study was conducted quantitatively using quasi-experimental design to compare the physics achievements between students who received peer discussion and those who did not. The subjects of the study were 189 Grade Nine students from Basic Education High School, Myitkyina and Basic Education High School, Myitkyina from Kachin State in 2017-2018 Academic Year. The students in the experimental groups were taught by using peer discussion while those in the control groups were taught by using conventional methods of teaching. After four-week treatment period, a posttest was administered to both groups in each school. Independent samples t-test was analyzed whether there were differences between two groups. According to t values ($t(110) = 19.24$, $p < .001$) at Basic Education High School, Myitkyina and ($t(75) = 9.26$, $p < .001$) at Basic Education High School, Myitkyina, the students who received a treatment by using peer discussion method demonstrated significantly better than those who received a treatment by using conventional methods of teaching. Therefore, research findings proved that peer discussion method has a positive contribution to physics teaching and learning at the high school level.

Keywords: Effectiveness, Peer Discussion, Physics, Teaching

About the presenter:

Padauk Win has PhD degree at Yangon University of Education. She conducted research for MEd and PhD Degrees. She is a former lecturer at the Methodology Department of Sagaing University of Education with 15 years of teaching experience. Moreover, she handles teaching methods and research for prospective and in-service teachers. She got a certificate for a regional training course for teachers to introduce nuclear sciences in secondary schools through innovative approaches in Argonne, IL, United States of America. She contributes the knowledge of education and research in line with international level. She shared experiences of research to Research Journals for Central Institute of Civil Service, Sagaing University of Education and International Journal of Educational Management and Development Studies. She also supervised research for Bachelor students, Master students and students for PhD degree.

